

#15



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DATE: 03/05/2002  
TIME: 09:56:03

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/747,029A

Input Set : A:\INNS031.ST25.txt  
Output Set: N:\CRF3\03052002\I747029A.raw

P.7

ENTERED

3 <110> APPLICANT: Union, Ann  
 4       Moereels, Henri  
 5       Meheus, Lydie  
 7 <120> TITLE OF INVENTION: PEPTIDES DESIGNED FOR THE DIAGNOSIS AND TREATMENT OF  
 8       RHEUMATOID ARTHRITIS  
 10 <130> FILE REFERENCE: 11362.0031NPUS00 INNS:031  
 12 <140> CURRENT APPLICATION NUMBER: US 09/747,029A  
 13 <141> CURRENT FILING DATE: 2000-12-21  
 15 <150> PRIOR APPLICATION NUMBER: EP 00870195.5  
 16 <151> PRIOR FILING DATE: 2000-09-08  
 18 <150> PRIOR APPLICATION NUMBER: EP 99870280.7  
 19 <151> PRIOR FILING DATE: 1999-12-21  
 21 <160> NUMBER OF SEQ ID NOS: 22  
 23 <170> SOFTWARE: PatentIn version 3.0  
 25 <210> SEQ ID NO: 1  
 26 <211> LENGTH: 18  
 27 <212> TYPE: PRT  
 28 <213> ORGANISM: Artificial Sequence  
 30 <220> FEATURE:  
 31 <223> OTHER INFORMATION: Synthetic Peptides  
 33 <220> FEATURE:  
 34 <221> NAME/KEY: MOD\_RES  
 35 <222> LOCATION: (1)..(3)  
 36 <223> OTHER INFORMATION: Xaa represents Ser, Thr, Asp, Glu, Asn, Gln, His, Lys or Arg  
 38 <220> FEATURE:  
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 40 <222> LOCATION: (4)..(4)  
 41 <223> OTHER INFORMATION: Xaa represents Ile, Leu, Val, Ala or Met  
 43 <220> FEATURE:  
 44 <221> NAME/KEY: MOD\_RES  
 45 <222> LOCATION: (5)..(5)  
 46 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe or  
 Trp  
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 50 <222> LOCATION: (6)..(6)  
 51 <223> OTHER INFORMATION: Xaa represents Gly  
 53 <220> FEATURE:  
 54 <221> NAME/KEY: MOD\_RES  
 55 <222> LOCATION: (7)..(7)  
 56 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe or  
 Trp  
 58 <220> FEATURE:  
 59 <221> NAME/KEY: MOD\_RES

60 <222> LOCATION: (8) . . (8)

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Input Set : A:\INNS031.ST25.txt  
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61 <223> OTHER INFORMATION: Xaa represents Pro or Gly  
 63 <220> FEATURE:  
 64 <221> NAME/KEY: MOD\_RES  
 65 <222> LOCATION: (10)..(10)  
 66 <223> OTHER INFORMATION: Xaa represents Ser, Thr, Asp, Gly  
 68 <220> FEATURE:  
 69 <221> NAME/KEY: MOD\_RES  
 70 <222> LOCATION: (11)..(11)  
 71 <223> OTHER INFORMATION: Xaa represents Citrulline, Gly, Ser or Thr  
 73 <220> FEATURE:  
 74 <221> NAME/KEY: MOD\_RES  
 75 <222> LOCATION: (12)..(12)  
 76 <223> OTHER INFORMATION: Xaa represents Citrulline  
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 80 <222> LOCATION: (13)..(13)  
 81 <223> OTHER INFORMATION: Xaa represents Gly  
 83 <220> FEATURE:  
 84 <221> NAME/KEY: MOD\_RES  
 85 <222> LOCATION: (14)..(14)  
 86 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe or

Trp

88 <220> FEATURE:  
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 90 <222> LOCATION: (15)..(15)  
 91 <223> OTHER INFORMATION: Xaa represent Arg, Lys, His, Asp, Glu, Ser, Thr, Gln, Asn,

Tyr,

92 Phe or Trp  
 94 <220> FEATURE:  
 95 <221> NAME/KEY: MOD\_RES  
 96 <222> LOCATION: (17)..(17)  
 97 <223> OTHER INFORMATION: Xaa represents Gly  
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 100 <221> NAME/KEY: MOD\_RES  
 101 <222> LOCATION: (18)..(18)  
 102 <223> OTHER INFORMATION: Xaa represents Tyr, His, Lys, Arg, Asp, Glu, Ser, Thr, Gln,

Asn,

103 Phe, Trp  
 105 <400> SEQUENCE: 1  
 106 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys  
 107 1 5 10 15

W--&gt; 109 Xaa Xaa

112 <210> SEQ ID NO: 2  
 113 <211> LENGTH: 15  
 114 <212> TYPE: PRT  
 115 <213> ORGANISM: Artificial Sequence  
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 118 <223> OTHER INFORMATION: Synthetic Peptides  
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 121 <222> LOCATION: (1)..(1)  
 122 <223> OTHER INFORMATION: Xaa represents Ile, Leu, Val, Ala or Met

RAW SEQUENCE LISTING  
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Input Set : A:\INNS031.ST25.txt  
Output Set: N:\CRF3\03052002\I747029A.raw

W--> 124 <220> FEATURE:  
125 <221> NAME/KEY: MOD\_RES  
126 <222> LOCATION: (2)..(2)  
127 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe  
or Trp

W--> 129 <220> FEATURE:  
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131 <222> LOCATION: (3)..(3)  
132 <223> OTHER INFORMATION: Xaa represents Gly

W--> 134 <220> FEATURE:  
135 <221> NAME/KEY: MOD\_RES  
136 <222> LOCATION: (4)..(4)  
137 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe  
or Trp

W--> 139 <220> FEATURE:  
140 <221> NAME/KEY: MOD\_RES  
141 <222> LOCATION: (5)..(5)  
142 <223> OTHER INFORMATION: Xaa represents Pro or Gly

W--> 144 <220> FEATURE:  
145 <221> NAME/KEY: MOD\_RES  
146 <222> LOCATION: (7)..(7)  
147 <223> OTHER INFORMATION: Xaa represents Ser, Thr, Asp or Gly

W--> 149 <220> FEATURE:  
150 <221> NAME/KEY: MOD\_RES  
151 <222> LOCATION: (8)..(8)  
152 <223> OTHER INFORMATION: Xaa represents Citrulline, Gly, Ser or Thr

W--> 154 <220> FEATURE:  
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156 <222> LOCATION: (9)..(9)  
157 <223> OTHER INFORMATION: Xaa represents Citrulline

W--> 159 <220> FEATURE:  
160 <221> NAME/KEY: MOD\_RES  
161 <222> LOCATION: (10)..(10)  
162 <223> OTHER INFORMATION: Xaa represents Gly

W--> 164 <220> FEATURE:  
165 <221> NAME/KEY: MOD\_RES  
166 <222> LOCATION: (11)..(11)  
167 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe  
or Trp

W--> 169 <220> FEATURE:  
170 <221> NAME/KEY: MOD\_RES  
171 <222> LOCATION: (12)..(12)  
172 <223> OTHER INFORMATION: Xaa represents Arg, Lys, His, Asp, Glu, Ser, Thr, Gln, Asn,  
Tyr,  
173 Phe or Trp

W--> 175 <220> FEATURE:  
176 <221> NAME/KEY: MOD\_RES  
177 <222> LOCATION: (14)..(14)  
178 <223> OTHER INFORMATION: Xaa represents Gly

W--> 180 <220> FEATURE:  
181 <221> NAME/KEY: MOD\_RES  
182 <222> LOCATION: (15)..(15)  
183 <223> OTHER INFORMATION: Xaa represents Tyr, His, Lys, Arg, Asp, Glu, Ser, Thr, Gln,

Asn,

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/747,029A

DATE: 03/05/2002  
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Input Set : A:\INNS031.ST25.txt  
Output Set: N:\CRF3\03052002\I747029A.raw

184 Phe or Trp  
 187 <400> SEQUENCE: 2  
 W✓ 189 Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa 15  
 190 1 5 10 15  
 192 <210> SEQ ID NO: 3  
 193 <211> LENGTH: 14  
 194 <212> TYPE: PRT  
 195 <213> ORGANISM: Artificial Sequence  
 197 <220> FEATURE:  
 198 <223> OTHER INFORMATION: Synthetic Peptides  
 200 <220> FEATURE:  
 201 <221> NAME/KEY: MOD\_RES  
 202 <222> LOCATION: (1)..(1)  
 203 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe  
 or Trp  
 205 <220> FEATURE:  
 206 <221> NAME/KEY: MOD\_RES  
 207 <222> LOCATION: (2)..(2)  
 208 <223> OTHER INFORMATION: Xaa represents Gly  
 210 <220> FEATURE:  
 211 <221> NAME/KEY: MOD\_RES  
 212 <222> LOCATION: (3)..(3)  
 213 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe  
 or Trp  
 215 <220> FEATURE:  
 216 <221> NAME/KEY: MOD\_RES  
 217 <222> LOCATION: (4)..(4)  
 218 <223> OTHER INFORMATION: Xaa represents Pro or Gly  
 220 <220> FEATURE:  
 221 <221> NAME/KEY: MOD\_RES  
 222 <222> LOCATION: (6)..(6)  
 223 <223> OTHER INFORMATION: Xaa represents Ser, Thr, Asp or Gly  
 225 <220> FEATURE:  
 226 <221> NAME/KEY: MOD\_RES  
 227 <222> LOCATION: (7)..(7)  
 228 <223> OTHER INFORMATION: Xaa represents Citrulline, Gly, Ser or Thr  
 230 <220> FEATURE:  
 231 <221> NAME/KEY: MOD\_RES  
 232 <222> LOCATION: (8)..(8)  
 233 <223> OTHER INFORMATION: Xaa represents Citrulline  
 235 <220> FEATURE:  
 236 <221> NAME/KEY: MOD\_RES  
 237 <222> LOCATION: (9)..(9)  
 238 <223> OTHER INFORMATION: Xaa represents Gly  
 240 <220> FEATURE:  
 241 <221> NAME/KEY: MOD\_RES  
 242 <222> LOCATION: (10)..(10)  
 243 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe  
 or Trp  
 246 <220> FEATURE:  
 247 <221> NAME/KEY: MOD\_RES  
 248 <222> LOCATION: (11)..(11)

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/747,029A

DATE: 03/05/2002  
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Input Set : A:\INNS031.ST25.txt  
Output Set: N:\CRF3\03052002\I747029A.raw

249 <223> OTHER INFORMATION: Xaa represents Arg, Lys, His, Asp, Glu, Ser, Thr, Gln, Asn, Tyr,

250 Phe or Trp

252 <220> FEATURE:

253 <221> NAME/KEY: MOD\_RES

254 <222> LOCATION: (13)..(13)

255 <223> OTHER INFORMATION: Xaa represents Gly

257 <220> FEATURE:

258 <221> NAME/KEY: MOD\_RES

259 <222> LOCATION: (14)..(14)

260 <223> OTHER INFORMATION: Xaa represents Tyr, His, Lys, Arg, Asp, Glu, Ser, Thr, Gln,

Asn,

261 Phe or Trp

264 <400> SEQUENCE: 3

WLC> 266 Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa  
267 1 5 10

269 <210> SEQ ID NO: 4

270 <211> LENGTH: 18

271 <212> TYPE: PRT

272 <213> ORGANISM: Artificial Sequence

274 <220> FEATURE:

275 <223> OTHER INFORMATION: Synthetic Peptides

277 <220> FEATURE:

278 <221> NAME/KEY: MOD\_RES

279 <222> LOCATION: (1)..(1)

280 <223> OTHER INFORMATION: Xaa represents Ser, Thr, Asp, Glu, Asn, Gln, His, Lys or Arg

282 <220> FEATURE:

283 <221> NAME/KEY: MOD\_RES

284 <222> LOCATION: (2)..(2)

285 <223> OTHER INFORMATION: Xaa represents Ser, Thr, Asp, Glu, Asn, Gln, His, Lys or Arg

287 <220> FEATURE:

288 <221> NAME/KEY: MOD\_RES

289 <222> LOCATION: (3)..(3)

290 <223> OTHER INFORMATION: Xaa represents Ser, Thr, Asp, Glu, Asn, Gln, His, Lys or Arg

292 <220> FEATURE:

293 <221> NAME/KEY: MOD\_RES

294 <222> LOCATION: (4)..(4)

295 <223> OTHER INFORMATION: Xaa represents Ile, Leu, Val, Ala or Met

297 <220> FEATURE:

298 <221> NAME/KEY: MOD\_RES

299 <222> LOCATION: (5)..(5)

300 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe

or Trp

302 <220> FEATURE:

303 <221> NAME/KEY: MOD\_RES

304 <222> LOCATION: (6)..(6)

305 <223> OTHER INFORMATION: Xaa represents Gly

307 <220> FEATURE:

308 <221> NAME/KEY: MOD\_RES

309 <222> LOCATION: (7)..(7)

310 <223> OTHER INFORMATION: Xaa represents His, Lys, Arg, Asp, Glu, Ser, Thr, Tyr, Phe

or Trp

312 <220> FEATURE:

*Use of n and/or Xaa has been detected in the Sequence Listing.  
Review the Sequence Listing to insure a corresponding  
explanation is presented in the <220> to <223> fields of  
each sequence using n or Xaa.*

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/747,029A

DATE: 03/05/2002  
TIME: 09:56:04

Input Set : A:\INNS031.ST25.txt  
Output Set: N:\CRF3\03052002\I747029A.raw

L:106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:109 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:119 M:283 W: Missing Blank Line separator, <220> field identifier  
L:189 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2  
L:266 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3  
L:360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4  
L:447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5  
L:521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6  
L:543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7  
L:563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8  
L:589 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9  
L:615 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10  
L:641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11  
L:667 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12  
L:693 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13  
L:716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14  
L:739 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15  
L:757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16  
L:776 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17  
L:797 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18  
L:815 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19  
L:833 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20  
L:851 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21  
L:869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22